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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,929	03/15/2001	Dong-Youl Lee	P56255	3658

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EXAMINER

DANIEL JR, WILLIE J

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 08/09/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/805,929

Applicant(s)

LEE, DONG-YOUL

Examiner

Willie J. Daniel, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The objections to the specification are withdrawn, as the proposed specification corrections are approved.

Claim Objections

2. Claim 16 is objected to because of the following informalities:
(Correction)
 - a. Claim 16 has "Mss"₄ in which the Examiner interprets as "MSs".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Widergen et al.
(hereinafter Widergen) (US 5,890,064).

Regarding **Claim 19**, Widergen discloses a call originating service method in a public/private common mobile communication system (100), the method comprising:
providing a public land mobile network (PLMN) (102) comprising a base station transceiver subsystem (BTS) (114) adapted to form a public cell area that is interworked with

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a private mobile communication network (142) comprising a BTS adapted to form a public/private common cell area (142) enabling a subscriber (120) to be provided with both a public mobile communication service and a private mobile communication service using a single mobile station (120) in said public/private common cell area (142) (see col. 3, line 61 - col. 4, line 19; col. 4, lines 27-33; Fig. 1);

determining whether a call origination message is a public mobile communication service request message or a private mobile communication service request message upon receiving the call origination message for requesting origination of a call from a mobile station (CMT - 120) in the public/private common cell area through the BTS (126) in the private mobile communication network (142) (see col. 7, lines 4-22,55-67; ; col. 9, lines 1-67), where calls for communication are routed to a mobile located in the public or private system; and

transmitting the call origination message to the PLMN when the call origination message is a public mobile communication service request message (see col. 7, lines 4-15; col. 9, lines 39-58; col. 12, lines 34-37; col. 13, lines 34-67), and

providing a corresponding private mobile communication service when the call origination message is a private mobile communication service request message (see col. 7, lines 4-22,55-62).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Widergen et al. (hereinafter Widergen) (US 5,890,064) in view of Mauger et al. (hereinafter Mauger) (US 5,537,610).

Regarding **Claim 16**, Widergen discloses a call originating service method in a public/private common mobile communication system, the method comprising:

providing the telecommunications network (100) which reads on the claimed “public/private common mobile communication system” comprising a plurality of mobile terminals (116) which reads on the claimed “mobile stations (MSs)”, a mobile switching center (MSC) (112), a plurality of public mobile communication network base station controllers (BSCs) connected to the MSC (112), a plurality of public mobile communication network base station transceiver subsystems (BTSs) (114) connected to each of the plurality of BSCs, each of the plurality of these BTSs adapted to form a corresponding public-only coverage area (140) which reads on the claimed “cell area”, a wireless office gateway (124) which reads on the claimed “public/private communication service unit” connected to one of the public mobile communication network's BSCs, and a RAN (126 - “includes radio equipment of RAN”; see col. 5, line 40-41) which reads on the claimed “private BTS” connected to the public/private communication service unit (124), the private BTS (126)

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adapted to form a public/private common cell area, one of said plurality of Mss being within said public/private common cell area (see col. 3, lines 61 - col. 4, line 25; Fig. 1), where the telecommunication network includes public and private coverage areas. The network including BSCs for controlling BS (114) as part of a base station subsystem and a plurality of network components would be obvious (see col. 4, lines 8-10,1-4), where the amount of components for the network can vary depending on factors such as size and scalability. ;

receiving at the public/private communication service unit (124) a call setup messages which reads on the claimed "call origination message" from the MS (122) in the public/private common cell area (142) through the private BTS (126) (see col. 7, lines 4-12,55-62; Fig. 1), where the network applies call setup messages for communicating with the terminals of the network;

determining whether the MS (120) in the public/private common cell area (142) is registered for a private mobile communication service by analyzing the received call origination message (see col. 7, lines 16-22,55-62), where the PN is used for determining if communication is for the corporate terminal (e.g., CMT - 120);

transmitting transparently the call origination message when the MS (11) in the public/private common cell area (142) is not registered for the private mobile communication service (see col. 13, lines 34-57), where calls from public mobile terminals (PMT) within the wireless office system (142) are transmitted to the MSC (112) which indicates the PMT are guest and not registered for the private cell area. The communication between the WO Gateway (124) and MSC (112) is via a trunk line (C) (see Fig. 1), and

determining whether identification information for the private mobile communication service is included in the call origination message when the MS (120) in the public./private common cell area (142) is registered for the private mobile communication service (see col. 7, lines 4-22; col. 7, line 56 - col. 8, line 6); and

transmitting transparently the call origination message when the identification information (PN) is not included in the call origination message (see col. 7, lines 4-22; col. 13, lines 34-57), where calls for public mobile terminals (PMT) are directed to the MSC (112) which indicates the PMT do not have a PN, and

providing private mobile communication service for the MS (120) in the public/private common cell area when the identification information (PN) is included in the call origination message (see col. 7, lines 4-22), where the calls are directed to corporate terminals (120) according to the PN. Widergen fails to disclose having the feature of transmitting a call origination message to one of said plurality of public mobile communication network BSC. However, the examiner maintains that the feature of transmitting a call origination message to one of said plurality of public mobile communication network BSC was well known in the art, as taught by Mauger.

In the same field of endeavor, Mauger discloses the feature of transmitting a call origination message to one of said plurality of public mobile communication network BSC (63) (see col. 11, line 66 - col. 12, line 2; col. 11, lines 49-53; col. 14, lines 41-48; col. 15, lines 20-27; Figs. 24, 27), where the calls are transmitted between the PABX (60) to a BSC (63) which is an intelligent BSC with MSC functionality.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Widergen and Mauger to have the feature of transmitting a call origination message to one of said plurality of public mobile communication network BSC, in order to allow a call to be transmitted from PABX to a BSC, as taught by Mauger.

Regarding **Claim 17**, Widergen discloses of a public/private common mobile communication system (100) adapted to provide a public/private mobile communication service in association with a public land mobile network (PLMN) (102) (see Fig. 1), the system comprising:

a plurality of mobile stations (MSs) (116), a mobile switching center (MSC) (112), a plurality of public mobile communication network base station controllers (BSCs) connected to the MSC (112), and a plurality of public mobile communication network base station transceiver subsystems (BTSs) (114) connected to the BSC's, each of the plurality of public mobile communication network BTSs being adapted to form corresponding public-only cell areas (140) (see col. 4, lines 4-16), where the network includes a base station (114) in which the BSC would be obvious for controlling the base station. Also, the plurality of components would be obvious according to factors such as size and scalability (see col. 4, lines 8-10);

a private BTS (126) connected to the public/private communication service unit (124), the private BTS (126) adapted to form a public/private common cell area (142), the public/private communication service unit (124) receives a call origination message from a

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particular one of the plurality of MSs (120) located in the public/private common cell area (142) through the private BTS (126) (see col. 7, lines 4-22,55-62; Fig. 1),

the public/private communication service unit (124) being configured to transparently transmit the call origination message when the call origination message is a public mobile communication service request message (see col. 10, line 56 - col. 11, line 1; col. 13, lines 34-57), where calls for the public system is routed between the WO Gateway (124) and the MSC (112) via the trunk line,

the public/private communication service unit (124) being configured to provide network access for a corresponding private mobile communication service when the call origination message is a private mobile communication service request message (see col. 5, lines 60-67; col. 7, lines 55-62). Widergen fails to disclose having the features a public/private communication service unit connected to one of said plurality of public mobile communication network BSCs; transmitting the call origination message to one of the plurality of public mobile communication network BSCs. However, the examiner maintains that the features a public/private communication service unit connected to one of said plurality of public mobile communication network BSCs; transmitting the call origination message to one of the plurality of public mobile communication network BSCs was well known in the art, as taught by Mauger.

Mauger further discloses the feature a PABX (60) which reads on the claimed “public/private communication service unit” connected to one of said plurality of public mobile communication network BSCs (63) (see col. 14, lines 42-58; col. 15, lines 20-23; Figs. 24, 26, 27);

transmitting the call origination message to one of the plurality of public mobile communication network BSCs (63) (see col. 11, line 66 - col. 12, line 2; col. 11, lines 49-53; col. 14, lines 41-48; col. 15, lines 20-27; Figs. 24, 27), where the calls are transmitted between the PABX (60) to a BSC (63) which is an intelligent BSC with MSC functionality.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Widergen and Mauger to have the features a public/private communication service unit connected to one of said plurality of public mobile communication network BSCs; transmitting the call origination message to one of the plurality of public mobile communication network BSCs, in order to allow a call to be transmitted from PABX to a BSC, as taught by Mauger.

Regarding **Claim 18**, Widergen discloses a call originating service method in a public/private common mobile communication system (100) (see Fig. 1), the method comprising:

providing the public/private common mobile communication system (100) comprising a plurality of mobile stations (MSs) (116), a mobile switching center (MSC) (112), a plurality of public mobile communication network base station controllers (BSCs) connected to the MSC (112), a plurality of public mobile communication network base station transceiver subsystems (BTSS) (114) connected to each of the BSC's, each of the plurality of public mobile communication network BTSS (114) adapted to form a corresponding public-only cell area (coverage area) (140) (see col. 3, line 61 - col. 4, line 16), where the network includes a base station (114) in which the BSC would be obvious for controlling the base station. Also,

the plurality of components would be obvious according to factors such as size and scalability (see col. 4, lines 8-10),

a private BTS (126) connected to the public/private communication service unit (124), the private BTS (126) adapted to form a public/private common cell area (142) (see Fig. 1);

determining whether a call origination message is a public mobile communication service request message or a private mobile communication service request message upon receiving the call origination message that requests origination of a call from one of said plurality of mobile stations (120) located in said public/private common cell area (142) through the private BTS (126) (see col. 7, lines 4-22,55-67; col. 9, lines 1-67), where calls for communication are routed to a mobile located in the public or private system; and

transmitting transparently the call origination message to a PLMN (102) when the call origination message is a public mobile communication service request message (see col. 7, lines 4-15; col. 9, lines 39-58; col. 12, lines 34-37; col. 13, lines 34-67), and

providing a corresponding private mobile communication service when the call origination message is a private mobile communication service request message (see col. 7, lines 4-22,55-62). Widergen fails to disclose having the feature a public/private communication service unit connected to a particular one of the plurality of public mobile communication network BSCs. However, the examiner maintains that the feature a public/private communication service unit connected to a particular one of the plurality of public mobile communication network BSCs was well known in the art, as taught by Mauger.

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Mauger further discloses the feature a public/private communication service unit (60) connected to a particular one of the plurality of public mobile communication network BSCs (63) (see col. 14, lines 42-58; col. 15, lines 20-23; Figs. 24, 26, 27);

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Widergen and Mauger to have the feature a public/private communication service unit connected to a particular one of the plurality of public mobile communication network BSCs, in order to allow a call to be transmitted from PABX to a BSC, as taught by Mauger.

Response to Arguments

5. Applicant's arguments with respect to claims 16-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willie J. Daniel, Jr. whose telephone number is (703) 305-8636. The examiner can normally be reached on 7:30-4:30.

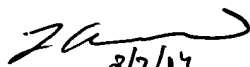
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WJD,JR/wjd,jr
06 August 2004


8/7/04
LESTER G. KINCAID
PRIMARY EXAMINER